Date filed: 4/1/2004

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Substitute fo	Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Complete if Known		
Substitute it				Application / Conf. No.	Unknown 10#15.483	
INFOR				Filing Date	4/1/204	
STATI				First Named Inventor	Stephen M. Trimberger	
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(use	(use as many sheets as necessary)		Examiner Name	Unknown P. KIK		
Sheet	1	of	3	Attorney Docket Number	X-940-1P-1P-2P US	

			U.S. PATENT	DOCUMENTS	
Examiner	Cite No.'	Document Number Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
nitials:	110.	US- 3,995,261	11-30-76	Goldberg	Figures Appear
		US- 4,020,469	04-26-77	Manning	
1		US- 4,700,187	10-13-87	Furtek	
		US- 5,459,342	10-17-95	Nogami et al.	1
1		US- 5,498,975	03-12-96	Cliff et al.	
		US- 5,889,413	03-30-99	Bauer	*
		US- 5,914,616	06-22-99	Young et al.	*
		US- 6,166,559	12-26-00	McClintock et al.	*
77		US- 6,167,558	12-26-00	Trimberger	
		US- 6,356,514 B1	03-12-02	Wells et al.	***************************************
		US- 6,128,214	10-03-00	Kuckes et al.	
		US- 6,256,767 B1	07-03-01	Kuckes et al.	
$\neg \neg$		US- 6,314,019 B1	11-06-01	Kuckes et al.	7
		US- 6,432,740 B1	08-12-02	Chen	
		US- 6,459,095 B1	10-01-02	Heath et al.	
		US- 5,790,771	08-04-98	Culbertson et al.	
		US- 10/631,461		Wells et al.	Filed 7/30/2003
		US- 10/199,535		Trimberger	Filed 7/18/2002
N		US- 6,651,238	11-18-03	Wells et al.	
(77)		US- 6,075,418	06-13-00	Kingsley et al.	

		FORE	IGN PATENT DOC	UMENTS		
Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines,	7.
	No.'	Country Code ^{3 -Number 4} -Kind Code ⁴ (Il known)	MM-DD-YYYY	Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
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Substitute for form 1449A/PTO		Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application / Conf. No.	4787875.4831
			CLOSURE	Filing Date	4/1/2014
			PI ICANT	First Named Inventor	Stephen M. Trimberger
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(use as many sheets as necessary)		Examiner Name	Unknown P. R. VIC		
Sheet	2	of	3	Attorney Docket Number	X-940-1P-1P-2P US

			U.S. PATENT	DOCUMENTS	
Examiner Initials	Cite No.1	Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
PCL		US- 6,232,845 B1	05-15-01	Kingsley et al.	Figures Appear
84		US- 5,777,887	07-07-98	Marple et al.	
WA		US- 6,427,156 B1	07-30-02	Chapman et al.	
OZ.		US- 10/104,324	 	Wells et al.	Filed on 03-22-2002
104		US- 6,664,808 B2	12-16-03	Ling et al.	
W		US- 10/388,000		Bapat et al.	Filed on 3-12-2003
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¹ Applicant's unique citation designation number (optional). ¹ See Kinds of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ¹ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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Inder the Paperwork Reduction Act of 1995, no person-Complete if Known Substitute for form 1449A/PTO Application / Conf. No. 187878 483 INFORMATION DISCLOSURE Filing Date **First Named Inventor** Stephen M. Trimberger STATEMENT BY APPLICANT Art Unit Unknown (use as many sheets as necessary) **Examiner Name Unknown** Attorney Docket Number Sheet X-940-1P-1P-2P US

		OTHER - NON PATENT LITERATURE DOCUMENTS					
Examiner Initials *	Cite No ¹						
P		SHARP, STEVE; "Xilinx Delivers Lower Cost While Continuing to Redefine Programmable Logic," 2002, pp 6-8, available from Xilinx, Inc., 2100 Logic Drive, San Jose, CA 95124.					
		BARADARAN, MEHDI et al; "Improving Detectability of Resistive Open Defects in FPGA," Center for Reliable Computing, available from Stanford University, Stanford CA 94305.					
		OVERTON, RICK; "Molecular Electronics Will Change Everything,"Wired.com, Issue 8.07, July 2000, pp 1-12, available from www.wired.com/wired/archive/8.07/moletronics_pr.html.					
		CHAPPELL BROWN; "Researchers Close To Delivering Molecular Circuits," Tektronix, 2/12/2002, pp. 1-4, Available from EETimes @ http://www.eetimes.com/story/OEG20020215S0063.					
\bigvee		NACKASHI, DAVID P. et al.; "Molectronics: A Circuit Design Perspective," pp. 1-9, Dept. of Electrical and Computer Engineering, North Carolina State University, ECE, Box 7914, NCSU, Raleigh, NC 27695-7914, available from http://www.ece.ncsu.edu/erl/faculty/paulf.html.					
		GOLDSTEIN, SETH COPEN et al.; "NanoFabrics: Spatial Computing Using Molecular Electronics," The 28th Annual International Symposium on Computer Architecture," June 2001, pp. 1-12, available from Carnegie Mellon University, School of Computer Science, Pittsburgh PA 15213-3891.					
		TAHOORI, MEHDI B. et al.; "Automatic Configuration Generation for FPGA Interconnect Testing," pp. 2-6, availabel from Center for Relaiable Computing, Stanford University, Stanford, CA.					
		SMITH, MICHAEL J. S.; "Application-Specific Integrated Circuits," Addison-Wesley VLSI Systems Series, 1997, pp. 711-804, available from Addison-Wesley Longman, Inc. http://www.awl.com/cseng					
X)		XILINX, INC., "Virtex-II 1.5V Field-Programmable Gate Arrays," Advanced Product Specification, November 29, 2001, pp. 1-39, DS031-2 (v1.9), available from Xilinx, Inc., 2100 Logic Drive, San Jose, CA 95124					
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^{&#}x27;Applicant's unique citation designation number. 2 Applicant is to place a check mark here if English tanguage Translation is attached.

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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
index the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Substitute for form 1449A/PTO Complete if Known 10/815,483 8508 Application / Conf. No. INFORMATION DISCLOSURE Filing Date April 01, 2004 First Named Inventor Stephen M. Trimberger STATEMENT BY APPLICANT **Art Unit** 2825 (use as many sheets as necessary) **Examiner Name** Phallaka Kik **Attorney Docket Number** Sheet of X-940-1P-1P-2P US

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Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where
Initials	No.	Number - Kind Code (if known)	MM-DD-YYYY	Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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^{&#}x27;Applicant's unique citation designation number (optional). 'See Kinds of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 'Enter Office that Issued the document, by the two-letter code (WIPO Standard ST.3). 'For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 'Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 'Applicant is to place a check mark here if English language Translation is attached.

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INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

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Application / Conf. No. 10/815,483 / 8508

Filling Date April 01, 2004

First Named Inventor Stephen M. Trimberger

Art Unit 2825

Examiner Name

(use as many sheets as necessary)

Sheet 1 of 1 Attorney Docket Number X-940-1P-1P-2P US

		Document Number	Publication Date	DOCUMENTS Name of Patentee or	Pages Columns Lines Where
Examiner	Cite No.'	Number - Kind Code (if known)	MM-DD-YYYY	Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
147		US- 6,651,225 B1	11-18-03	Lin et al.	
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